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Revised Community Involvement Plan

Nease Chemical Superfund Site
Perry Township, Columbiana County, Ohio

February 1996

Prepared for:

U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

Contents

Figures

Table

Appendices

1.0 Introduction

This document revises the 1987 community involvement plan developed for the Nease Chemical (Nease) **Superfund*** site in Perry Township, Columbiana County, Ohio. This revision presents community involvement activities proposed for the remainder of Superfund cleanup at the Nease site.

The U.S. Environmental Protection Agency (U.S. EPA) gathered information for this revision on July 18, 19, and 20, 1995, during face-to-face interviews with residents and local officials who live near the site. Additional information about the Nease site and the community surrounding it was obtained from federal, state, and local sources.

The revised Nease community involvement plan provides the following information:

- Brief site description and history.
- Community profile.
- Summary of past and present site-related community concerns.
- Community involvement objectives and activities for the remainder of Superfund cleanup at the Nease site.
- List of contacts.
- Locations for **information repositories** and public meetings.
- Description of the Superfund process, and a glossary of terms related to site cleanup.

U.S. EPA established the Superfund Community Involvement Program to encourage communication between communities and governmental agencies responsible for the Superfund program at individual hazardous waste sites. The goal of the community involvement program is to involve residents in the Superfund process. This revised community involvement plan reflects concerns and interests expressed by community members near the Nease site. It presents community involvement activities planned to address these concerns and interests during site cleanup.

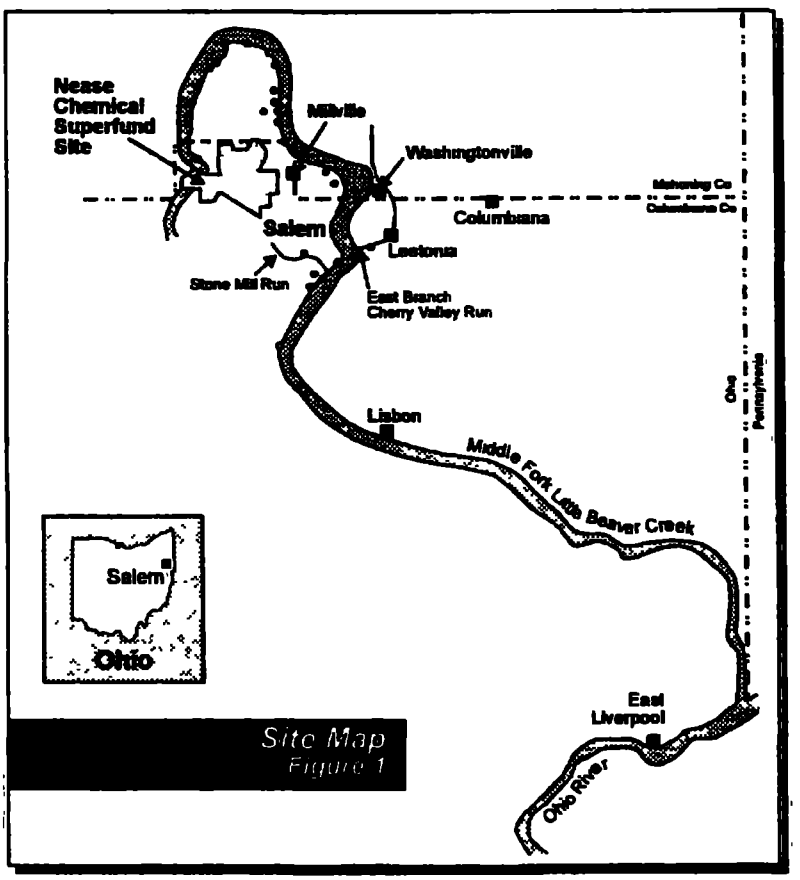
*Words in the glossary (Appendix D) appear in **boldface print** on first reference in this document.

2.0 Background Information

2.1 Site Description

The Nease Chemical (Nease) Superfund site is in Perry Township, northwest of the city of Salem, in Columbiana County, Ohio. The Nease site, which occupies about 44 acres, is the former location of a chemical manufacturing plant. The site slopes mainly to the northeast, toward the Middle Fork of Little Beaver Creek, which is about 1,500 feet from the site. Residences and farmland surround the site on three sides; an industrial park is northeast of the site.

The city of Salem wastewater treatment plant is east of the site; the Salem Country Club is south of the site. The Middle Fork of Little Beaver Creek flows northward and turns south, to the Ohio River.



Site Map
Figure 1

2.2 Site History

Beginning in the early 1960s, Nease Chemical Company owned and operated a chemical manufacturing plant at the site. The plant produced a variety of chemical compounds, including household cleaning compounds, fire retardants, and pesticides. Nease sold these chemicals to customers who produced agricultural, pharmaceutical, and other chemical-based products. During chemical manufacturing operations, unlined lagoons and drums were used for storage and waste disposal. A chronology of the Nease site, including regulatory actions, follows.

1961 Nease Chemical Company built a small chemical production plant in Perry Township, Ohio, and began manufacturing chemical compounds.

1966-1969 Nease manufactured the pesticide, mirex, a chemical widely used to control fire ants.

1973-1975 Nease discontinued manufacturing activities and closed and dismantled the plant under the supervision of the Ohio Environmental Protection Agency (Ohio EPA).

Nease used five unlined ponds for treatment and storage of plant wastes. Drummed waste was buried onsite. Also, chemical spills occurred during plant operations. When Nease closed the manufacturing facility, the following activities took place:

- Buildings and manufacturing equipment, except a warehouse and two small block buildings, were removed.
- Pond 1, contained within the boundary of Pond 2, was drained, and the liquid was treated and discharged to the Salem city wastewater treatment plant (SCWTP). The pond was coated with lime and filled with soil.
- Pond 2, except for a small pool of water, was also drained, treated, and discharged to the SCWTP. Lime was applied to the remaining water and sludge, and soil was used to fill in the pond.
- Water from Ponds 3, 4, and 7 was discharged to the SCWTP.

1977 U.S. EPA banned mirex. Ruetgers Chemical Company, Inc., acquired Nease Chemical Company, including the nearly vacant site northwest of Salem, to form the Ruetgers-Nease Chemical Company, Inc. (Ruetgers-Nease). Although Ruetgers-Nease never operated at the site, as owner of the site, by law, the company is responsible for the site.

1980 Ohio EPA and Ruetgers-Nease conducted a preliminary site investigation.

1982 Ohio EPA and the Ohio Department of Health conducted a formal site investigation following the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** guidelines.

1983 Under the supervision of Ohio EPA, Ruetgers-Nease started cleaning up the site, and installed systems to collect on-site **leachate** and control soil erosion. About 540 truckloads of soil (9,500 cubic yards) and 115 drums were removed from the site. U.S. EPA placed the site on the **National Priorities List**, and took control of the investigation and cleanup process.

1986 Ruetgers-Nease proposed the installation of a site **ground-water** treatment system to Ohio EPA and U.S. EPA.

1987 Ohio EPA conducted fish and sediment sampling in the Middle Fork of Little Beaver Creek. The Ohio Department of Health issued a fish consumption advisory for the Middle Fork of Little Beaver Creek, between the junction of Route 14-A and Allen Road in Salem, to Route 11 south of Lisbon.

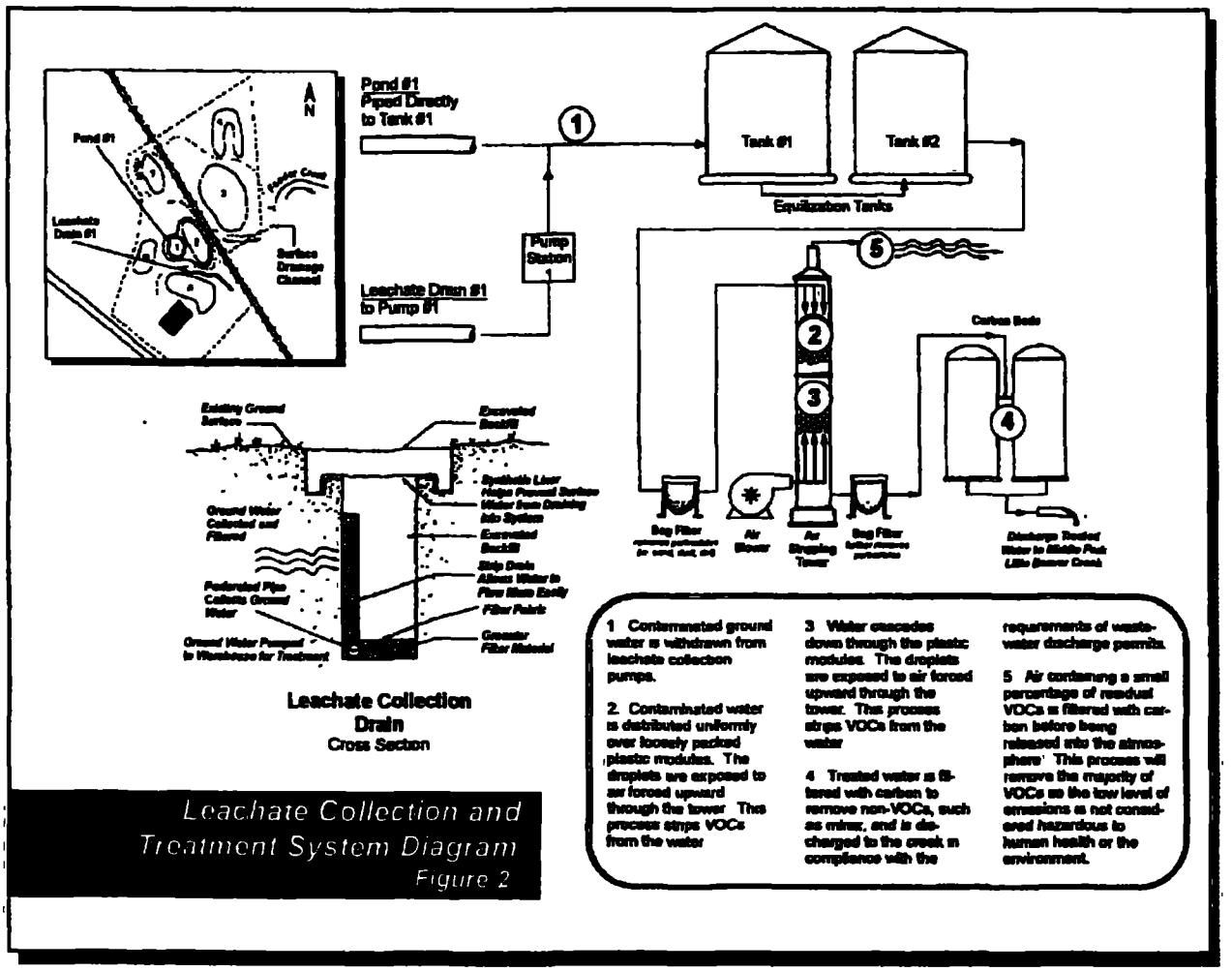
1988 Ruetgers-Nease agreed, in an **administrative order**, to conduct a **remedial investigation (RI)** and **feasibility study (FS)** under the supervision of U.S. EPA and Ohio EPA. A **risk assessment** would be conducted as part of the RI.

1990 U.S. EPA and Ohio EPA approved the RI work plan. Field work began in April 1990. The Ohio Department of Health reported on the blood test results of 42 people who worked at Nease or who had access to

the Middle Fork of Little Beaver Creek in Columbiana and Mahoning counties. Results released in May 1990 showed that 28 of 42 participants had no detectable mirex in their blood. The 14 people who tested positive had low levels of mirex in their blood.

1991-93 Fieldwork was conducted and samples were analyzed.

1993 U.S. EPA and Ruetgers-Nease negotiated a second administrative order. Ruetgers-Nease agreed to complete a **removal action** to stop site leachate from entering the Middle Fork of Little Beaver Creek. The removal action included on-site treatment of leachate (Figure 2), placement of barriers in ditches around the site, and other measures, as necessary, to keep contamination from moving off site.



Leachate Collection and Treatment System Diagram
Figure 2

1994 The Ohio Department of Health, in cooperation with the **Agency for Toxic Substances and Disease Registry (ATSDR)** began a follow-up mirex **exposure assessment** to determine whether mirex is a general community health problem.

2.3 Upcoming Site Activities

U.S. EPA anticipates that the RI and risk assessment will be completed within a year. In 1996, U.S. EPA will release a proposed final site cleanup plan to the public for review and comment. U.S. EPA, in cooperation with Ohio EPA, will review public comments and sign a **Record of Decision (ROD)**, authorizing a final cleanup plan for the Nease site.

3.0 Community Profile

Salem was first settled in 1803 by members of the Society of Friends (Quakers) who came from Pennsylvania, New Jersey, Maryland, and Virginia. In 1806, the town was laid out on the corners of four townships: Goshen, Butler, Green, and Salem. Perry Township, which now encircles the town of Salem, was later established.

Before the Civil War, Salem was widely known as the headquarters of an anti-slavery society. It also was the site of the first Women's Suffrage Convention held in 1850. The founding of Salem is celebrated each year with a four-day "Salem Jubilee" on the third weekend in July.

Today, Salem, nicknamed "City of Peace," is an industrial town with an area population of 18,000, according to the 1994 population figures provided by the Salem Chamber of Commerce. Data collected during the 1990 Census indicates that the average family income in the Salem area is $27,795. The average number of persons per household is 2.43 in the city, and 3.48 in the Township.

Downtown Salem recently underwent a multi-million dollar revitalization program to upgrade its infrastructure, including new sidewalks, street scapes, new street lamps, additional parking areas, and landscaping. Aside from the central business district, Salem has two shopping plazas--Salem Plaza and East Gate Plaza.

Industry in the Salem area produces products such as molded plastics, pumps, electric furnaces, rolling mills, plumbing ware, furniture, hydraulic valves, machine tools, labels, and periscopes. The city of Salem owns an industrial park, zoned for medium to heavy industry, on the northwest corner of the city. The city has a development plan for continued land acquisition and industrial expansion at the park.

The industrial and economic development arm of the Salem Chamber of Commerce is the Salem Area Industrial Development Corporation (SAIDC). SAIDC assists local businesses and industry with expansion programs. It also plans and promotes new industrial opportunities in the Salem area. Since 1959, SAIDC has been instrumental in retaining or creating jobs for more than 4,000 workers in the Salem area.

Reflecting the Quaker belief in a strong education, Salem has a highly regarded elementary and high school education system. In addition, it also has a regional campus of Kent State University, Allegheny Wesleyan College, and Salem Trade Extension. Nearby Youngstown State University also provides educational opportunities for the community.

The Salem Public Library has more than 65,000 books, and maintains a collection of records, microfilm, photographs, and historical data.

Ten public golf courses are located within a 10-mile radius of the city of Salem. Area residents boat, fish, and swim at nearby Guildford Lake State Park and the Berlin Reservoir.

Community growth in the Salem area has been slow. The population is about what it was when the 1987 community involvement plan was written. As in other parts of the country where growth has been slow and industrial jobs have been lost, militia groups have formed, along with a deep distrust of the federal government. Although no militia members were interviewed, most residents interviewed blamed the federal government for "taking so long to clean up the Nease site."

In addition, Salem has been characterized as an area where protest has become a common form of social commentary. During 1994, the *Salem News* ran a front page story outlining this phenomenon.

Information for this section came from the Salem Chamber of Commerce, the *Salem News*, and the 1995 community interviews.

4.0 History of Community Concern

Citizens have been concerned about the Nease site for more than 35 years. In 1962, 35 people signed a petition to protest odors from site operations. Two days later, 75 people attended a Perry Township Board of Trustees meeting protesting odors from the Middle Fork of Little Beaver Creek.

In 1967, a group of citizens filed an injunction against Nease, and in 1968, the Ohio department of Health began air monitoring at the site. In 1970, a Perry Township trustee, who represented and assisted residents near the plant, was accused of harassment by Nease Chemical Company in a federal lawsuit.

In 1988, the Ohio Department of Health issued a fish advisory for the Middle Fork of Little Beaver Creek. Sampling conducted in 1987 indicated that fish tissues were contaminated in an area from the site to the Lisbon Dam.

During interviews for the 1987 community involvement plan, residents expressed concern about contamination in the Middle Fork of Little Beaver Creek. They were also concerned about ground-water and private well contamination, and possible health effects. Finally, residents wanted more information about the site, and they wanted the information to be presented in layman's terms.

One citizens group, Citizens Opposing Pollution (COP), a local environmental group based in Lisbon, has been actively following site activities and has worked to keep residents along the creek informed about site concerns and cleanup activities. COP members have also been active on many other environmental issues in the Salem/Lisbon area.

In response to these concerns, U.S. EPA, in cooperation with Ohio EPA and the Ohio Department of Health, has held several meetings and produced and distributed several fact sheets about mirex and site cleanup activities. The last meeting, an availability session, was held at Kent State University in February 1994. Only a few residents came out to ask questions and comment about site activities.

In response to the low turnout, later in 1994, U.S. EPA set up meetings with several groups in the community, including the COP citizens group. U.S. EPA tailored these meetings to address each group's specific site concerns and to solicit any additional concerns.

During 1995 community interviews, U.S. EPA representatives asked residents what they thought of these activities, and whether they were worthwhile. Most residents wanted action at the site; they seemed less interested in meetings to discuss

site studies. Ohio Department of Health officials working in the Salem area report that residents they have contacted generally would like more meetings to get information about site activities and study results. Local agencies, such as the Columbiana County Health Department, endorsed regular fact sheets about the status of site activity. County Health Department officials said regular updates would help them address citizen questions.

Although residents are interested in mirex health effects, many interviewed emphasized that they want the site cleaned up and expect that U.S. EPA, along with the other agencies working at the site, will focus their efforts on getting that task accomplished as soon as possible. The Ohio Department of Health reports that many residents still show great concern about health effects that may be related to the Nease site. Section 5.0 provides more information about these and other community concerns.

Other environmental issues seem to have affected the community's perception of U.S. EPA. Over the past several years, community members have written to U.S. EPA officials working on the Nease site about problems with sludge management, flooding, and prison construction and wastewater treatment plant issues. During community interviews, several residents reported that U.S. EPA did little or nothing to address their concerns about these issues. Further, they noted that it was unclear as to what role, if any, U.S. EPA could play in addressing environmental issues outside of the Superfund program. Basically, some residents wondered whether U.S. EPA was a resource to them to address other environmental concerns aside from the Nease site.

5.0 Current Community Concerns

In July 1995, U.S. EPA conducted face-to-face community interviews with residents who live around the Nease site. Interview information has been used to develop this revised site community involvement plan.

U.S. EPA conducted 15 interviews with a cross section of local officials and residents in and around the Nease site. Although each person interviewed knew about the Nease site, many stated that they "hadn't heard much about it lately." Elected officials and members of Citizens Opposing Pollution (COP) expressed the most concern about the site. These citizens are frustrated with the slow pace of site cleanup and the approach used to conduct the mirex exposure assessment.

Overall, concerns expressed during community interviews fell into six major categories:

- Slow cleanup pace.
- Distrust of U.S. EPA.
- Regulatory role confusion.
- Mirex exposure assessment.
- Health effects.
- Environmental effects.

The remainder of this section summarizes citizen comments regarding each concern.

5.1 Slow Cleanup Pace

Every person interviewed commented on the slow pace of site cleanup and asked when the site would "finally be cleaned up." Some interviewed stated that they "were not interested in more site studies." They want to know "when the site will actually be cleaned up." When questioned further about what they meant by "cleaned up," several residents stated that they "are frustrated that nothing has actually been cleaned up at the site" and they are "worried that, over time, contaminants have moved off site."

Several residents blamed U.S. EPA for the slow cleanup pace. Some believe the Superfund process is simply "too slow" and "bureaucratic." Others believe that the site would have been cleaned up years ago if U.S. EPA had not intervened. Several residents stated that the **potentially responsible party (PRP)**, Ruetgers-Nease, proposed the ground-water cleanup plan "years ago." They are frustrated that U.S. EPA has been unable to expedite site cleanup.

5.2 Distrust of U.S. EPA

Along with their frustration regarding the slow cleanup pace, some residents are still upset about the way U.S. EPA informed the community about problems with the site, especially the possible health issues related to mirex. Several officials commented that U.S. EPA representatives who were invited to a public meeting sponsored by the city of Salem in the late 1980s, "created an uproar by scaring people about mirex." These officials believe U.S. EPA unnecessarily alarmed approximately 400 citizens who attended the meeting. Now, more than five years later, most residents and officials interviewed did not seem overly alarmed about the mirex contamination; however, they report that they and many other residents distrust U.S. EPA because the site is "still not cleaned up."

In addition, they distrust U.S. EPA because "many timetables for cleanup have slipped." They believe U.S. EPA provided little or no explanation for cleanup delays. One elected official stated, "It's time to hold people's feet to the fire to make sure that this site gets cleaned up soon."

Other residents expressed their lack of trust for U.S. EPA by alluding to a belief that "the federal government never gets anything done right." "We never get a response to our questions," and "every time we talk to someone at EPA, that person leaves for another job and we never get our questions answered or our problems addressed."

5.3 Regulatory Role Confusion

Every resident interviewed was unclear about the roles of the various regulatory agencies involved with site cleanup. Each resident thought the U.S. EPA "controlled" or "had approval authority over" the Ohio Department of Health and Ohio EPA.

One elected official summed up the confusion that exists about the role of regulatory agencies when he stated, "I thought you (U.S. EPA) had the authority to make the Ohio Department of Health respond to local concerns about the mirex study." The official was surprised when U.S. EPA representatives explained that U.S. EPA had neither review or approval authority over the Ohio Department of Health or the Department's mirex exposure assessment. The official had hoped U.S. EPA would be able to direct the Ohio Department of Health to be more responsive to community concerns regarding the exposure assessment.

Other Columbiana County construction projects that concern residents also have contributed to confusion about the roles of regulatory agencies. Some residents

are concerned about construction of a federal prison and a wastewater treatment facility in the area. These residents asked for clarification about the role that U.S. EPA has in the planning and approval of construction of these facilities. They also wanted to know what, if any, role U.S. EPA will have during and after construction.

In general, interview responses indicated that no matter what agency is working on the Nease site or other environmental projects in the Salem area, the community believes that U.S. EPA has authority over these projects. To the community, the agencies appear to be interchangeable; however, complaints clearly focus on U.S. EPA or the "federal government" as "the problem."

5.4 Mirex Exposure Assessment

Several residents interviewed who are community activists on area environmental issues expressed ridicule regarding the mirex exposure assessment, especially the expanded, follow-on study begun in 1994. These residents complained that the follow-on study ignored people who have been exposed to mirex, in favor of taking a "random sampling" that targeted for testing many "people who have never been in the creek or who have lived here only a short time."

Most residents interviewed called the mirex exposure assessment a "complete waste of money." Some demanded to know why U.S. EPA "allowed a random study to be done that missed so many people who have been exposed to mirex throughout their lives." Others complained that "people living near the creek who wanted to be tested were refused." They felt this was unfair and unsafe. Another resident stressed the need to test area children, especially those living in trailer parks near the creek. In general, the environmental community activists interviewed, as well as several elected officials, expressed frustration about the mirex exposure assessment and skepticism about the validity of assessment results.

In a related issue, several residents and one elected official were disappointed and angry because they had asked the Ohio Department of Health in the exposure assessment to include residents who wanted to be tested for mirex. They asked what U.S. EPA could do to help the Ohio Department of Health understand that community goodwill that would be created by agreeing to this request. Residents stated that without the Ohio Department of Health allowing those who want to be tested to be tested, the "community will never support the results of the exposure assessment."

U.S. EPA contacted the Ohio Department of Health regarding these concerns and the revision of the community involvement plan. Department of Health representatives who have been working on the mirex exposure study pointed out that they have conducted health surveys "with a large number of community residents during the past year." In addition, the Department has conducted two blood draw sessions. In each session, Department officials report about 80 people voluntarily have come out to serve as study participants.

Communication with study participants, as well as other community members in the Salem area, indicates a willingness in the community "to contribute to studies that would help [the community] understand or determine possible health effects," Department of Health representatives stated. "Children of appropriate age were tested," and "an attempt was made to contact all individuals whose surveys revealed any possible exposure levels," Department representatives noted. In addition, Department representatives stated that for the current mirex exposure study, "no one whose survey demonstrated any possible exposure was refused participation."

As site cleanup progresses, U.S. EPA and Ohio EPA, in cooperation with the Ohio Department of Health, will strive to provide whatever information is available for public release regarding the mirex exposure assessment and other mirex-related health issues.

5.5 Health Effects

As previously mentioned, residents wonder about the health effects of mirex and whether discharge from the on-site treatment facility will be safe for the creek. Several residents gave testimonials about the effects they believe mirex has had on their health or the health of their family members. Residents are also concerned that U.S. EPA and other agencies investigating the site cannot say with certainty what health effects mirex causes. In addition, they are concerned with the lack of information regarding links between mirex and cancer or non-cancer illnesses in humans.

5.6 Environmental Effects

Residents are concerned about the water and sediments in the Middle Fork of Little Beaver Creek. Some say that they see people "swimming and fishing in the creek," in spite of the posted advisory.

In October 1987, Ohio Department of Health issued an advisory against consuming fish caught in the Middle Fork Little Beaver Creek from Salem downstream to the State Route 11 bridge, below the Lisbon dam. The following year, the advisory was revised to also caution people against swimming, wading, and other activities that would bring them into contact with contaminated sediments along the same stretch of creek. Since 1987, warning signs have been posted to reinforce these advisories, and the advisories remain in effect.

Other residents expressed concern that effluent from the on-site treatment plant and the new Columbiana County wastewater treatment plant may adversely affect the creek. Several local officials and residents expressed concerns about how far mirex contaminated sediments may extend in the creek. They also want reassurance that contamination is not continuing to move off site.

Finally, they want testing of animals that hunters may catch or kill for food. They are concerned that mirex in the fat of these animals may be consumed by humans.

It appears that most of the residents interviewed are unaware of a game trapping study conducted by the Ohio Department of Health in 1989 to see whether mirex affected wildlife in the area. The study looked at animals who live near the Middle Fork of Little Beaver Creek and near the site. Nine areas along the creek were tested.

After a literature review and a review of wildlife in the study area, it was determined that the most appropriate animals to study were raccoons and opossums because these animals are carnivores, who feed in relatively limited areas and may eat fish from the creek. Deer were not selected for the study because they feed only on plants and over a wide-ranging area. Mirex is not readily absorbed by plants or water; however, it can be trapped in sediments or soil. Raccoons and opossums were used for this study because these were the animals most likely to come into contact with mirex and ingest it. For example, these animals may ingest mirex by eating mirex-contaminated fish.

Samples from both raccoons and opossums contained low levels of mirex. Animals taken from stations closest to the site had the highest levels. In general, fat samples had higher levels than blood samples. No other game studies have taken place.

6.0 Community Involvement Program

As part of the community interviews, U.S. EPA asked local residents and officials to evaluate the effectiveness of previous community involvement activities, and to suggest the best methods for communicating with them about future site activities. Using this information and requirements for public involvement under Superfund (CERCLA), U.S. EPA developed objectives and activities for future community involvement in conjunction with the completion of the Nease site cleanup.

6.1 Objectives

The Nease revised community involvement plan is designed to foster open communication among community members, state and federal agencies overseeing site activities, and other interested parties. The plan has four specific objectives:

- Address community questions about site cleanup promptly and in language that can be understood by the community.
- Update the community regularly regarding site cleanup activities.
- Coordinate community involvement activities with Ohio EPA and the Ohio Department of Health to foster community trust in regulatory agencies working together on site cleanup.
- Provide the community with opportunities for input on site cleanup activities.

6.2 Activities

During July 1995 community interviews, U.S. EPA asked community members and local officials whether they were satisfied with U.S. EPA's previous methods of informing the community about site cleanup. These methods included fact sheets, press releases, public meetings, and information repositories at the Lepper Library in Lisbon and the Salem Public Library in Salem. In general, residents were aware of these methods, but frustrated with the slow pace of cleanup and consequently, unimpressed with methods used by U.S. EPA to inform them of site activities. Residents, however, made suggestions to improve communication and community involvement. These suggestions have been incorporated into the plan for future community involvement activities outlined in the remainder of this section.

Point of Contact

Successful community involvement begins with a reliable point of contact for information. **Ms. Cheryl Allen, the U.S. EPA Region 5 community involvement coordinator for the Nease site, will be the public's point of contact. Ms. Allen can be reached at the U.S. EPA Region 5 office in Chicago; her telephone number is 312-353-6196. U.S. EPA also has a toll-free telephone number: 1-800-621-8431.**

The U.S. EPA community involvement coordinator will also be responsible for disseminating information to interested citizens and local media as technical milestones for the site are met. She will maintain a dialogue with local residents and officials regarding site developments.

Appendix A contains additional contact information for Ms. Allen and other U.S. EPA, Ohio EPA, and Ohio Department of Health officials involved with the Nease site.

Information Repositories

U.S. EPA has established three information repositories for the Nease site at the following locations: Salem Public Library, Lepper Library in Lisbon, and the Columbiana Health Department. In addition, an **administrative record** file has been established at each library.

U.S. EPA will update each repository with site-related documents as they are produced in conjunction with the remainder of site activities. Appendix B presents complete contact information for the repositories and administrative record files.

News Releases/Public Notices

U.S. EPA will continue to provide news releases and public notices to local print, television, and radio media. Appendix A contains a list of media outlets near the Nease site.

Public Meetings/Availability Sessions

Public meetings or **availability sessions** will be held to explain major site developments. At the meetings, U.S. EPA will outline its role in directing or overseeing site activity, and health and safety measures that will be taken to protect the community during these activities. The goal of each meeting will be to provide citizens with basic, useful information to help them understand the issues involved

with site cleanup, and to facilitate a working relationship among all parties affected by the site--the community, regulators, and site workers.

Additional public meetings or availability sessions will be held if requested by the public or warranted by unexpected major technical activities at the site. Appendix B contains the probable meeting location; Appendix A contains persons or organizations who will be notified about the meetings.

Residents also suggested that U.S. EPA should periodically attend the Township Trustee Association bi-monthly meetings. Trustees from communities along the 14-mile stretch of the creek affected by contaminated sediments attend these meetings, and would welcome updates on site cleanup.

Mailing List

U.S. EPA will maintain a mailing list of individuals interested in the Nease site. This list includes federal, state, and local officials from areas near the site; local civic and environmental group representatives; the media; and private citizens who have expressed an interest in the site. Persons interested in site activities can have their names added to the mailing list by contacting the U.S. EPA community involvement coordinator at 1-800-621-8431.

Fact Sheets/Updates

U.S. EPA will produce easy-to-read fact sheets or updates as technical milestones occur at the site. Fact sheets will summarize technical activities, list personnel to contact or locations to visit for additional site information, and present a schedule of upcoming site activities. They will also explain the role played by U.S. EPA, Ohio EPA, and the Ohio Department of Health in the site activities covered in the fact sheet. In response to positive comments from residents during the interviews, each fact sheet will include photographs of site activities, where possible. Fact sheets will be distributed to the site mailing list.

6.3 Implementation Schedule

Table 1 is an implementation schedule for community involvement activities recommended for the duration of the Nease site cleanup. Specific dates for these activities will be determined by site technical milestones.

Table 1
Implementation Schedule for Community Involvement Activities

Technical Milestone	Community Involvement Activities
Completion of RI/FS	• Prepare a proposed plan fact sheet. • Update site information repositories with appropriate site documents. • Prepare a news release. • Hold a public meeting and public comment period–transcribe the meeting for the record. • Review public comments, respond to comments, and issue a record of decision (ROD). • Place a newspaper advertisement announcing the ROD signing; send a copy of the ROD to the information repositories.
Start of final site cleanup design	• Prepare a fact sheet, summarizing the design details and implementation schedule. • Prepare a news release. • Hold a public meeting or availability session to present design details and answer citizen questions. • Update site information repositories with design documents as they become available.
Implementation of cleanup design	• Prepare a news release and site updates, as needed. • Inform local officials of site progress
Completion of final site cleanup	• Prepare a news release and a fact sheet to announce completion. • Hold a media event to commemorate cleanup completion.

Appendix A
List of Contacts

A. Federal Elected Officials

The Honorable John Glenn (202) 224-3353
U.S. Senate
503 Hart Senate Office Building
Washington, DC 20510

District Office (614) 469-6697
U.S. Senate
200 N. High Street, Room 400
Columbus, OH 43215

The Honorable Michael Dewine (202) 224-2315
U.S. Senate
140 Russell Senate Office Building
Washington, DC 20510

District Office (614) 469-6774
U.S. Senate
200 N. High Street, Room 405
Columbus, OH 43215

The Honorable James A. Traficant, Jr. (202) 225-5261
U.S. House of Representatives
2446 Rayburn House Office Building
Washington, DC 20515

District Office (216) 743-1914
125 Market St.
Youngstown, OH 44503

B. State Elected Officials

The Honorable George V. Voinovich (216) 787-3240
Office of the Governor
17820 Rosecliff Rd.
Cleveland, OH 44119

The Honorable Robert Burch (614) 466-6508
OH State Senate
State House
Columbus, OH 43266-0604

The Honorable Sean Logan (614) 466-8022
OH State House of Representatives
State House
Columbus, OH 43266-0603

C. Local Officials

Columbiana County

Michael P. Halleck (216) 332-1729
County Commissioner
1302 Pembrook Drive
Salem, OH 44460

Donald A. Lowe (216) 532-2076
County Commissioner
1215 Parshall Rd.
Wellsville, OH 43968

John P. Wargo (216) 424-9511
County Commissioner
34481 Yellow Creek Church Rd.
Salem, OH 44460

Anthony J. Dattilio (216) 427-2217
Court Clerk
40461 SR 558
Leetonia, OH 44431

Richard J. Koffel (216) 424-7255
Sheriff
35301 SR 518
Hanoverton, OH 44423

Veronica E. Wolski (216) 424-5874
County Recorder
42451 SR 518
Lisbon, OH 44432

Bert Dawson (216) 385-2105
County Engineer
50487 Fisher Avenue
East Liverpool, OH 43920

Robert D. Morehead, M.S. (216) 424-0272
Health Commissioner
Columbiana County Health Department
321 S. Beaver St.
P.O. Box 396
Lisbon, OH 44432

County of Columbiana Emergency Management Agency

Violet Palmer (216) 424-7018
Assistant Coordinator
7301 Lisbon-Canfield Rd.
Lisbon, OH 44432

Perry Township

Jeff Hochadel (216) 332-8518
Trustee
1320 Depot Rd.
Salem, OH 44460

Joyce Wilson (216) 337-8616
Trustee
1320 Depot Rd.
Salem, OH 44460

Jerry Wolford (216) 332-5433
Trustee

Salem, OH 44460

City of Salem

Larry D. Dejane (216) 332-4241
Mayor
231 S. Broadway Ave.
Salem, OH 44460

Thomas J. Barrett (216) 332-4241
Council President
231 S. Broadway Ave.
Salem, OH 44460

City of Lisbon

Jeff Snyder (216) 424-5503
Mayor
Village Hall
24 Nelson Ave.
Lisbon, OH 44432

John Deichler (216) 424-5503
Council President
Village Hall
24 Nelson Ave.
Lisbon, OH 44432

D. Civic/Citizen Groups

Marilyn Winn (216) 222-1466
Township Trustee Association
32256 King Rd.
Salem, OH 44460-9535

Allen Cleveland (216) 337-3473
Executive Director
Salem Chamber of Commerce
713 E. State St.
Salem, OH 44460

Jack Howells (216) 337-3473
President
Salem Area Industrial Development Corp. (SAIDC)
713 E. State St.
Salem, Ohio 44460

Gene Byler (216) 332-3315
Kiwanis Club
P.O. Box 903
Salem, OH 44460

George Hayes
Rotary Club
P.O. Box 1025
Salem, OH 44460

Ruby Tucker (216) 424-3474
Ruth Miller
Citizens Opposing Pollution
620 Thomas Road
Lisbon, OH 44432-1050

E. Federal Agency Officials

Cheryl Allen (P-19J) (312) 353-6196
Community Involvement Coordinator **1-800-621-8431**
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, IL 60604

Sheila Sullivan (SR-6J) (312) 886-5251
Remedial Project Manager **1-800-621-8431**
U.S. Environmental Protection Agency
77 W. Jackson Blvd.
Chicago, IL 60604

F. State Agency Officials

Susan Shymske (614) 644-2160
Public Interest Center
Ohio Environmental Protection Agency
1800 WaterMark Drive
P.O. Box 1049
Columbus, OH 43216-1049

Joseph Trocchio (216) 963-1193
Site Coordinator
Ohio Environmental Protection Agency
2110 Aurora Rd.
Twinsburg, OH 44087

Tracy Shelley (614) 644-6447
Sheri Hazzard (614) 466-5498
Ohio Department of Health
Site Assessment Section
Bureau of Environmental Health and Toxicology
246 N. High St.
Columbus, OH 43266-0588

G. Media

Newspapers

Salem News (216) 332-4601
Cathie M. DeFazio
Managing Editor
161 N. Lincoln Ave.
Salem, OH 44460

The Morning Journal (216) 424-9541
Dorma Tolson
Editor
308 W. Maple St.
P.O. Box 249
Lisbon, OH 44432

Lisbon Herald (216) 482-0600
Box 448
Columbiana, OH 44408

Quaker Heritage (216) 332-1511
645 E. State St.
Salem, OH 44460

The Vindicator (216) 747-1471
107 Vindicator Square
Youngstown, OH 44503

East Liverpool Review (216) 385-4545
210 E. 4 St.
East Liverpool, OH 43920

Radio

WSOM AM/WQXK FM (216) 337-9544
Business and Sales Office
465 E. State St.
Salem, OH 44460

WKBN Broadcasting Corp. (216) 782-1144
Business Office
3930 Sunset Blvd.
Youngstown, OH 44512

WELA FM/WOHI AM (216) 385-1040
15655 State Route 170
East Liverpool, OH 43920

Television

WFMJ TV-21 (216) 744-8821
101 W. Boardman St.
Youngstown, OH 44503

WKBN Broadcasting Corp. (216) 782-1144
Business Office
3930 Sunset Blvd.
Youngstown, OH 44512

Appendix B

Locations of Information Repositories And Suggested Public Meeting Place

Information Repositories

An information repository contains documents used to make Superfund decisions. U.S. EPA encourages citizens to visit the Nease Chemical site information repositories at the following locations:

Lepper Library (216) 424-3117
303 E. Lincoln Way
Lisbon, Ohio 44432

Contact: Reference Librarian

Hours: Monday, 10:00 a.m. to 8:00 p.m.
Tuesday and Wednesday, 10:00 a.m. to 6:00 p.m.
Thursday, 10:00 a.m. to 8:00 p.m.
Friday and Saturday, 10:00 a.m. to 6:00 p.m.
Closed Sunday

Salem Public Library (216) 332-0042
821 E. State Street
Salem, Ohio 44460

Contact: Reference Librarian

Hours: Monday, 10:00 a.m. to 8:00 p.m.
Tuesday and Wednesday, 10:00 a.m. to 6:00 p.m.
Thursday, 10:00 a.m. to 8:00 p.m.
Friday and Saturday, 10:00 a.m. to 6:00 p.m.
Closed Sunday

Columbiana County Health Department (216) 424-0272
321 S. Beaver Street
P.O. Box 396
Lisbon, Ohio 44432

Contact: Robert Morehead, Health Commissioner

Hours: Monday through Friday, 8:00 a.m. to 4:00 p.m.
Closed Saturday and Sunday

The administrative record, a file that contains all information used by U.S. EPA to make a cleanup decision for the site, is also available each location.

Note: Items of information in the repositories and administrative record are reference documents. As such, documents may be reviewed or photocopied by citizens at the libraries, but they may not be removed from these locations.

Suggested Public Meeting Location

Kent State University
Salem Regional Campus
2491 State Route 45 South
Salem, Ohio

Contact: Maureen Dickey
(216) 332-0361

Appendix C
Description of Superfund Process

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), more commonly known as "Superfund," was passed in 1980 and amended by the Superfund Amendments and Reauthorization Act (SARA) in 1986. CERCLA authorizes U.S. EPA to investigate and respond to releases of hazardous substances that may endanger public health or the environment. CERCLA established a fund of $8.5 billion to pay for the investigation and cleanup of sites when parties responsible for the problems are unable or unwilling to pay for the work. U.S. EPA may then, through legal action, recover the costs of the investigation and cleanup from the responsible parties to replenish the fund for other Superfund projects.

After a site is discovered, U.S. EPA investigates it and scores it, using the Hazard Ranking System (HRS). This system addresses several factors:

- Possible health risks to the human population.
- Potential hazards created by substances at the site.
- Potential for site substances to contaminate air or drinking water supplies.
- Potential for site substances to pollute or harm the environment.

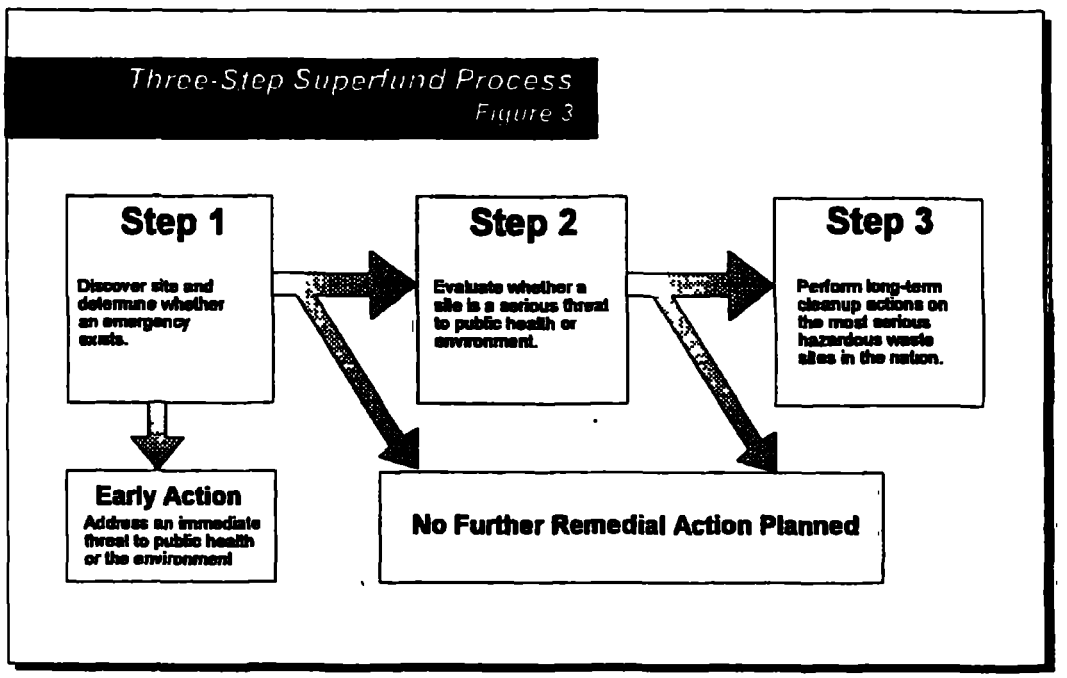
If a site's HRS score is high enough, it is placed on U.S. EPA's National Priorities List. Every site on the National Priorities List qualifies for the federal Superfund program. After a site is listed, U.S. EPA undertakes a thorough investigation to identify parties who may be legally responsible for the contamination problems. The search for potentially responsible parties (PRPs) can and frequently does continue throughout the remedial investigation and feasibility study (RI/FS) for the site. Once identified, these PRPs are asked to participate in the cleanup. If they are able to do so, but still refuse, they may be faced with legal action.

U.S. EPA develops a work plan and conducts an RI to assess the nature and extent of contamination to characterize potential risks to the community and the environment. U.S. EPA then performs an FS to examine various alternatives to correct or control the contamination. When the FS is completed, U.S. EPA evaluates the alternatives identified and recommends the alternative considered best for the site. A public comment period follows to give community members the opportunity to submit their comments on the alternatives. After the public comment period, U.S. EPA considers the community's concerns and chooses a specific long-term action for

the site. This action is presented in a record of decision, U.S. EPA's formal decision document that summarizes the decision-making process and the selected cleanup remedy for a site. After the record of decision is signed, the design of the remedy is developed and implemented.

The time needed to complete each of these steps is different for every site. In general, an RI/FS takes one to two years. Design of corrective action takes about six months to one year. The actual corrective action typically takes one to two years to implement, although treatment of contaminated groundwater may take several years and groundwater monitoring may continue for up to 30 years.

U.S. EPA monitors the site during all remedial activities. If contamination becomes an imminent threat to public health or the environment at any time during the remedial process, U.S. EPA may conduct an emergency action to alleviate the problem. In addition, U.S. EPA keeps residents and officials informed about activities at the site and provides opportunities for citizens to participate in the decision-making process. U.S. EPA considers citizen input in its decision regarding site cleanup.



Appendix D
Glossary

Agency for Toxic Substances and Disease Registry (ATSDR)

Superfund created this agency within the Public Health Service to work with other government agencies to initiate and implement a variety of health-related responsibilities.

ATSDR develops toxicological profiles, prepares site-specific health assessments, establishes formal registries of persons exposed to hazardous substances, develops and disseminates health education information, establishes and maintains literature inventories on hazardous substances, helps prepare health and safety programs for workers at Superfund sites and for workers responding to emergency releases, and provides health-related support in public health emergencies.

Administrative Order

A legal document signed by the U.S. Environmental Protection Agency (U.S. EPA) directing an individual, business, or other entity to take corrective action or refrain from an activity. It describes the violations and actions to be taken and can be enforced in court.

Administrative Record

All documents containing information the U.S. EPA uses to select actions or impose administrative sanctions. This includes correspondence, work plans, reports, and the community involvement plan.

Availability Session

An "open house" meeting hosted by U.S. EPA to meet with citizens informally regarding site activities.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Commonly known as Superfund. This law was passed in December 1980 in the wake of such incidents as Love Canal and the Valley of the Drums. CERCLA or Superfund established a program to identify sites where hazardous substances have been, or might be, released into the environment; to ensure that they are cleaned up by responsible parties or the government; to evaluate damages to natural resources; and to create a claims procedure for parties who have cleaned up sites or spent money to restore natural resources. CERCLA was expanded and extended by the Superfund Amendments and Reauthorization Act (SARA) passed in 1986.

Exposure Assessment

An exposure assessment is part of the risk assessment process. It identifies how people and/or animals are exposed (e.g., ingestion, inhalation, dermal contact) to contaminants and to what extent and for how long. Using mathematical models, an attempt is made to predict contaminant concentration and movement.

As part of an exposure assessment, two scenarios may be developed: one for current exposure and the other for possible future exposure called a "reasonable maximum exposure scenario." To estimate future exposure, the assessment assumes the highest beneficial use of the site possible in the future, such as a family living on the site for a lifetime. Consequently, the assessment may include hypothetical exposure pathways that may seem unlikely given current site conditions.

Feasibility Study (FS)

The second part of a two-part study called a remedial investigation/feasibility study. The feasibility study involves identifying and evaluating the most appropriate technical approaches to addressing contamination problems at a Superfund site. Alternatives are evaluated for their effectiveness in protecting human health and the environment.

Ground Water

Ground water is formed when rain or other precipitation soaks through sand, gravel, or rock and fills small openings or crevices beneath the ground surface. The rock, or sand and gravel formations, are called aquifers. When water accumulates in sufficient quantity, it can provide a resource for drinking water.

Information Repository

A file containing information, technical reports, and reference documents regarding a Superfund site. The information repository is usually in a public building, such as a public school, city hall, or library, that is conveniently located for community residents. The file at the information repository is continually updated as the site proceeds through the Superfund remedial process.

Leachate

Leachate is produced when water, such as rain and melted snow, seeps through waste. This water carries components of the waste (e.g., mirex) through soil and potentially into the ground water, or over land, and off site.

Mirex

Mirex is a chemical that was once used as a pesticide in the southern part of the United States. Health experts have studied mirex by watching how it affects the health of laboratory animals. Based on these studies, health experts believe mirex may cause cancer if people come into contact with it over long periods of time.

Nease Chemical produced mirex in Salem, Ohio, for several years, until the factory closed in 1973. The factory is located near the Middle Fork of Little Beaver Creek. U.S. EPA and Ohio EPA have found mirex in nearby creek sediments and fish and believe the mirex came from the Nease Chemical factory.

National Priorities List (NPL)

U.S. EPA's list of the most contaminated hazardous waste sites in the country. Sites on the NPL are eligible for the Superfund program.

Potentially Responsible Party (PRP)

Those identified by U.S. EPA as potentially liable under CERCLA for cleanup costs. PRPs may include generators and present or former owners/operators of certain facilities or real property where hazardous wastes have been stored, treated, or disposed of, as well as those who accepted hazardous waste for transport and selected the facility.

Record of Decision (ROD)

A public document that explains the cleanup alternative selected by U.S. EPA for a Superfund site. The record of decision is based on information gathered during the remedial investigation and feasibility study for the site. It also reflects U.S. EPA's consideration of public comments and community concern regarding the site.

Remedial Investigation (RI)

The first of the two-part study known as a remedial investigation/feasibility study. The remedial investigation involves collecting and analyzing information about a Superfund site to determine the nature and extent of contamination that may be present. The investigation also determines how conditions at the site may affect human health or the environment.

Removal Action

Short-term actions taken to respond promptly to any release or substantial threat of release of any hazardous substance or any pollutant or contaminant that may present an imminent and substantial danger to public health and welfare.

Risk Assessment

In the Superfund process, a risk assessment is an effort to characterize the potential health risks posed by an NPL site. A qualitative and quantitative evaluation is performed to define the risk posed to human health by the presence or potential presence of specific pollutants. Baseline risk assessments are performed as part of the remedial investigation.

Superfund

A term commonly used to describe the federal program established by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).